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**From:** Veal, Lee  
**Sent:** Fri 8/14/2015 4:16:57 PM  
**Subject:** Fwd: EOC Spot Report: Update #7, Region 8, Gold King Mine Release into Animas River; San Juan County, CO

FYI

Also of note: the HQEOC has set up daily calls with all RMs and ST managers on this event.

There may be an RSC call out.

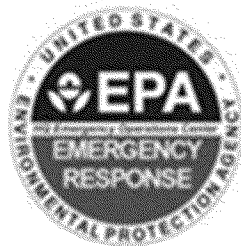
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Begin forwarded message:

**From:** "Eoc, Epahq" <Eoc.Epahq@epa.gov>  
**Date:** August 13, 2015 at 6:26:02 PM EDT  
**To:** "Eoc, Epahq" <Eoc.Epahq@epa.gov>  
**Subject:** EOC Spot Report: Update #7, Region 8, Gold King Mine Release into Animas River; San Juan County, CO

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# **EOC Spot Report: Update #7, Region 8, Gold King Mine Release into Animas River; San Juan County, CO**

**US Environmental Protection Agency**

**Report as of 1830 EDT on 08/13/2015**

## **Overview:**

On 8/5, an EPA and Colorado State Division of Reclamation Mining and Safety team was working to investigate and address contamination at the abandoned Gold King Mine in San Juan County, CO. This work resulted in a large release of mine wastewater into the upper portions of Cement Creek. Initial estimates indicated that the release was approximately one million gallons that was held behind unconsolidated debris near an abandoned mine portal. The estimate has since been revised to 3 million gallons. There were several workers at the site at the time of the breach and all were unharmed. The release's path flows through three of EPA's regions: Region 8—Colorado, Utah and the Southern Ute Tribe; Region 6--New Mexico; and, Region 9--Navajo Nation. The R6 Mobile Command Post arrived in Farmington, NM on 8/9.

The flow from the Gold King mine is currently estimated at about 215 gallons per minute. The mine water is being treated in a series of settling ponds constructed near the portal. The treatment appears to be effective. The pH of the water is being raised with the addition of lime and sodium hydroxide solution to facilitate sedimentation of the metals in the ponds and flocculant is being added to increase the amount of sedimentation. The treated water that is being discharged to Cement Creek has a pH of 5.5. Baseline water quality data from the past 17 years has been obtained and will be compared with the new water quality data. EPA is making upgrades to the wastewater treatment system to ensure its continued operation.

The incident caused a spike in concentrations of total and dissolved metals as the contaminated mine water moved downstream. These concentrations began to trend toward pre-event conditions by 8/6. The contaminant plume is depositing sediments and EPA is beginning to assess the impacts of the sediment. All municipal drinking water systems along the Animas River in Colorado, New Mexico, and Utah either are using alternate water sources or have enough clean

source water stored that they have not had to shut down.

**State, Local and other Federal Agency Actions:** San Juan County officials are engaged in the response activities. State officials are also on scene. Following the release, the Colorado Department of Public Health and the Environment (CDPHE) notified water users downstream so they could take appropriate steps to turn off intakes until the contaminated water passes. The Colorado Fish and Wildlife Conservation Office is monitoring effects on wildlife and aquatic life in the affected area.

The La Plata County Sheriff issued an order closing the Animas River to all watercraft from the north County line (San Juan County, Colorado) to the south County line (at the Colorado/New Mexico State line) until further notice. Furthermore, all such watercraft must be removed from the Animas River within the locations cited above. The decision was made after consultation with the EPA, CDPHE, the San Juan Basin Health Department, and representatives of the Southern Ute Indian Tribe. The Order will remain in effect until it is determined that the river is safe. R8 contacted the US Fish and Wildlife Service and the US Department of Interior about this incident. The U.S. Geological Survey (USGS) measured increased river flows and provisionally calculated flow volume of approximately 3 million gallons discharged from the Gold King Mine.

#### **EPA Actions:**

*Response Organization:* EPA is integrated in Unified Command in Durango, CO and in four Incident Command Posts (ICPs) in Silverton and Durango, CO, Farmington, NM, and Lake Powell (at the Arizona and Utah Border). Unified EPA Area Command has stood up operations out of Durango, CO with representatives from EPA Regions 6, 8 and 9.

A public-facing website has been set up for the response: <http://www2.epa.gov/goldkingmine>. The EPA Administrator, Gina McCarthy, arrived in Durango, CO on August 12 to tour the Animas River and meet with members of Unified EPA Area Command.

At the request of the national Superfund program, EPA HQ, Region 9 and Region 10 are deploying personnel to form a 4 person team to conduct an assessment of the release from the mine with the goal of providing an initial report by the end of next week.

*Sampling and Data Review:* The HQ Environmental Unit (EU) performed cursory reviews of Region 8 water samples taken August 5 - 9 and Region 6 water samples taken August 7 – 8 previously validated by regional data teams. These data have been posted to the incident website. The EU also has a list of labs via OEM's Environmental Response Laboratory Network (ERLN).

A draft sampling plan is being developed to address sampling and analysis of river water, sediment and well water. This plan is being developed jointly by Regions 8, 6 and 9. Sampling will continue throughout the impacted area as well as ahead of the pulse of wastewater to establish baseline water quality. EPA will be jointly evaluating data and information with partners to determine when access to the Animas River will be restored for recreational activities, irrigation and drinking water. EPA, Tribal, State and local officials are coordinating these decisions based on sampling data, risk screening levels and other related factors.

Daily residential sampling is occurring. To date, 226 requests have been received. There were 20 private drinking water samples taken on 8/11/2015 with a total of 49 through the end of 8/11/2015. Bottled water shipments from local suppliers have been occurring daily and distributed as requested. To date, 224 cases of bottled water have been purchased to hand out to the community. EPA collected nine surface water and sediment samples from the public drinking water intake locations in New Mexico on 8/12/2015. EPA added cyanide to the list for analysis for 8/11/2015 only. The State requested that EPA test for cyanide for one day to confirm that cyanide is not an issue. All the sample locations on 8/11/2015 had pH levels within the pH range specified by the State of New Mexico. EPA sampled twenty-two private water wells along the Animas and San Juan Rivers on 8/12/2015. Sampling continues at private water wells within 500 feet of the river and a depth of less than 100 feet. EPA staff assisted NMED in analyzing the water samples local residents brought to the San Juan County fairgrounds. It is estimated that 500 samples have been received by the state mobile lab.

The State of Colorado has developed screening levels for agricultural exposure. Based on the data thus far, EPA and ATSDR do not anticipate adverse health effects from exposure to the metals detected in the river water samples from skin contact or incidental (unintentional) ingestion. Similarly, the risk of adverse effects on livestock that may have been exposed to metals detected in river water samples from ingestion or skin contact is low.

*Wildlife:* The assessment of impacts to wildlife and fish populations is ongoing. EPA has seen no indication of widespread fish mortality in the Animas or San Juan Rivers. The State will be

evaluating those and other ecological impacts with partners as we move forward. EPA is also working with the NM Department of Game Fish and the U.S. Fish and Wildlife Service to investigate reports of impacts to wildlife.

*Claims:* EPA has a claims process for compensating citizens who suffer personal injury or property damage caused by U.S. government actions. The process includes guidance on documentation that may be required to support claims for loss of employment and loss of income, among other claims. Region 8 has had inquiries about such claims from business owners in CO.

See previous reports for past EPA regional and HQ actions.

**Media Interest: High**

<http://www.washingtontimes.com/news/2015/aug/12/gold-king-mine-spill-democrats-green-activists-scr/>

<http://www.latimes.com/opinion/op-ed/la-oe-0813-reynolds-mining-disaster-20150813-story.html>

<http://www.cnn.com/2015/08/12/opinions/pagel-animas-river-pollution/index.html>

<http://www.csmonitor.com/USA/2015/0812/Mine-waste-in-Animas-and-San-Juan-Rivers-looks-better-for-now-video>

[http://www.bostonherald.com/news\\_opinion/national/2015/08/damages\\_in\\_colorado\\_mine\\_spill](http://www.bostonherald.com/news_opinion/national/2015/08/damages_in_colorado_mine_spill)

**The HQ EOC will continue to monitor and provided updates as needed.**

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